STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY	:	
	:	
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Approval of Energy Efficiency and Demand	:	**Docket No. 07-0540**
Response Plan Pursuant to Section 12-103(f)	:	
Of the Public Utilities Act	:	

DIRECT TESTIMONY OF VINCENT J. CUSHING
ON BEHALF OF
THE BUILDING OWNERS AND MANAGERS ASSOCIATION OF CHICAGO

December 14, 2007

I. Introduction and Qualifications

Q. Please state your name and business address.

A. My name is Vincent J. Cushing. My business address is 1350 S. Indiana Pkwy., Chicago IL 60605.

Q. By whom are you employed and in what capacity?

A. I am employed by Metropolitan Energy, LLC as its Senior Vice President and by Clean Urban Energy, Inc. as CEO.

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of The Building Owners and Managers of Chicago ("BOMA/Chicago").

Q. Would you please summarize your professional qualifications?

A. I have 35 years experience in the electric energy industry as an engineer, manager, energy consultant and executive. This experience encompasses power contracting, grid operations and economics, generation environmental compliance, residential & commercial demand response, integrated resource planning, strategic planning, power supply planning, and financial risk management. For over 25 years I held managerial positions with responsibility for transmission, bulk power, PJM, and strategic planning at the Potomac Electric Power Company. Prior to my current positions, I served as Senior Vice President of Calpine Power Services Company, an independent power company, and EnergyConnect, Inc., a commercial building demand response company that I cofounded. My professional resume is provided in Exhibit _____(VJC-1).

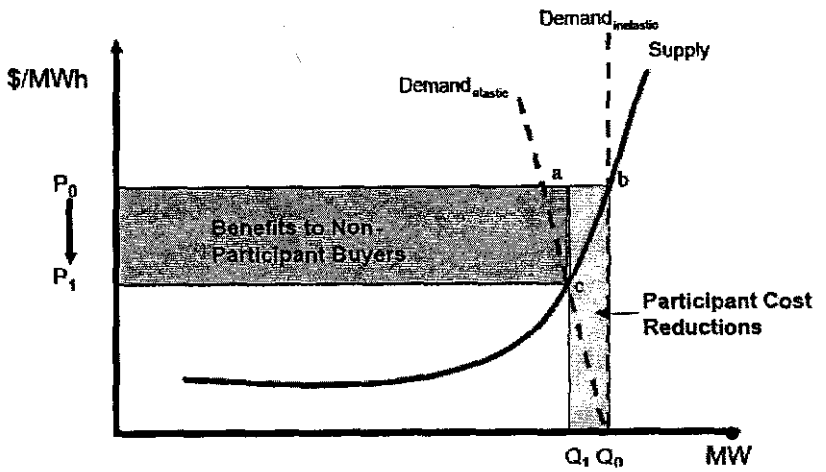
Q. Have you previously testified before the Illinois Commerce Commission (the "Commission" or "ICC")?

A. I have provided testimony and comments in workshops but not formally in a docketed proceeding in an ICC case. I have testified before the state regulatory commission in Washington, D.C. and served as electric utility industry liaison to the Federal Energy Regulatory Commission.

II. Purpose and Scope

Q. What is the purpose of your testimony?

A. My testimony is intended to provide further BOMA/Chicago support for the metering/data infrastructure proposal proposed by Mr. Skadowski in this proceeding. I do that by explaining the benefits of robust demand response resources and by explaining the importance of a metering/data infrastructure to the successful development of demand response resources in Northern Illinois. A discussion of demand response starts with the following supply curve.[1] It demonstrates the benefits of demand response



[1] Kathan, David, "Policy and Technical Issues Associated with ISO Demand Response Programs", The National Association of Regulatory Utility Commissioners, July 2002.

to all electricity consumers:

Q. Please describe the above graph.

A. The graph demonstrates generally the value of supply curve participation by demand response resources – direct value to participants and indirect, more substantial value to all electric consumers in Northern Illinois.

Q. How is the balance of your testimony organized?

A. My testimony is organized as follows: I first define demand-side resources and discuss the benefits derived form a robust demand-side resources industry in Northern Illinois. I then support Mr. Skadowski's recommendation to develop a meter/data infrastructure as the most important action that the Commission can take to foster a demand response resource in Northern Illinois.

III. Testimony

Q. From an industry perspective, what are demand response resources?

A. Demand-side resources ("DSR") is commonly referred to as, and for purposes hereof used interchangeably with, "demand response." The term "resources" adds recognition to customers' ability to be used as system resources. The US Demand Response Coordinating Council defines demand response as:

Providing electricity customers in both retail and wholesale electricity markets with a choice whereby they can respond to dynamic or time-based prices or other types of incentives by reducing and/or shifting usage,

particularly during peak periods, such that these demand modifications can address issues such as pricing, reliability, emergency response, and infrastructure planning, operation, and deferral.

Q. What are the benefits of a robust DSR industry in Illinois?

A. Most fundamentally, DSR reduces the cost of energy to customers. DSR also provides value to generating companies, electric grid operators, distribution companies, and retail energy service providers. DSR benefits include:

Lower, more stable electricity prices – DSR lowers electric prices for all consumers by introducing competitive resources into the daily mix and by clipping electric price spikes.

Economic efficiency – An efficient electricity market, like any other efficient market, depends upon the appropriate interaction of supply and demand.

Improved reliability – DSR expands the reliability resources available to grid operators. DSR is especially valuable in metropolitan areas where generation and transmission are expensive and difficult to site. Finally, DSR mitigates against extreme system reliability events that are expensive to remedy with traditional generation solutions.

Increased risk management – DSR helps manage electric volume and price risk.

Environmental benefits – DSR enables more stable and more efficient loading of coal-fired plants. Stable operation enables better tuning of pollution control systems. Efficient loading enables less coal burn.

Market power mitigation – DSR improves confidence in competitive markets by introducing broadly dispersed competitive resources into a supply mix dominated by a few large generating companies.

Reduced T&D system build-out – Targeted DSR helps defer or avoid T&D infrastructure upgrades, especially significant in metropolitan areas where undergrounding is costly.

IV. Recommendations

Q. Do you support Mr. Skadowski's recommendation to develop a meter/data infrastructure.

A. Yes. A meter/data infrastructure, as proposed by Mr. Skadowski, is the most important action and first step that the Commission can take to foster a demand response resource in Northern Illinois. Moreover, interval data access should be liberally and freely provided for use by BOMA Chicago members and the many energy service companies with whom they do business, for several reasons:

Competitive demand response industry – the Commission should provide DSR infrastructure and institutional support that invites competing DSR providers into Northern Illinois. DSR competitors have proven their capabilities and their value in several other parts of the country, including other parts of PJM.

Mitigating Cost of Market Entry for DSR competitors – the best way to make Northern Illinois attractive to DSR providers – and to improve DSR competition – is provide a metering/data infrastructure. An institutional infrastructure removes both an entry cost for DSR providers and a switching cost for their customers.

Strengthening Demand Response Analysis and Valuation – a metering/data infrastructure enables DSR program designers, policymakers and customers to anticipate demand response impacts and benefits. Also, demand response program managers and overseers need to be able to reliably measure the net benefits of demand response options to ensure that they are (cost-effectively) providing needed demand reductions.

Q. Does this conclude your testimony?

A. Yes.

VINCENT J. CUSHING, JR.

Background Summary: *Thirty-five years experience encompassing all facets of the electricity business* – power contracting, grid operations and economics, generation environmental compliance, commercial building demand response, strategic planning, retail power supply planning, and financial risk management – as an engineer, manager, consultant, and executive.

- Developed numerous business plans, market/competitor analyses, financial analyses, and financial pro formas for utilities, electric generating companies, retail electric service providers, and related technology businesses.
- Developed and applied advanced analytical approaches to risk management, asset valuation, power supply planning, retail product development, retail energy profiles and tariff analyses, and financial forecasting.
- Served on the Operating Committee of the North American Electric Reliability Council; on the executive committees of regional power pools and reliability coordinating councils; as Chairman of the Interconnection Arrangements Committee of the Edison Electric Institute (EEI); and as industry liaison to the Federal Energy Regulatory Commission.
- Co-founded EnergyConnect, Inc. in 1998 initially to serve the electric generation industry. Later developed a demand response business to enable large urban commercial buildings to participate in regional electric grid operations and markets.
- Held various managerial positions with responsibility for transmission, bulk power, and strategic planning at the Potomac Electric Power Company over 25 years. Throughout career, negotiated, contracted, evaluated, and administered billions of dollars of power pooling, power purchase, transmission, and QF contracts.

Metropolitan Energy, LLC, 2005

As Senior Vice President, co-founded Metropolitan Energy to physically and financially integrate large commercial office buildings with regional electric market prices and operations. Commercial building customers profit from reduced energy expense, new energy revenues, risk-managed energy budgets, and more discerning capital improvements.

EnergyConnect Inc, 1998 to 2004

As Senior Vice President, co-founded EnergyConnect, Inc. to serve the electric generation industry – focusing on business planning, asset valuation, asset acquisition and divestiture, environmental compliance, and risk management. Engagements included:

- Generation business plans with supporting market/competitor analyses, production asset valuations, risk management strategies, and financial analyses/forecasts.
- Analyses of NO_x and SO_2 compliance strategies and investments – and emission allowance regulations and markets – for one of the largest coal-fired generation portfolios in the U.S.
- Power supply risk management – featuring risk profiles, options analyses, and Monte Carlo simulations.
- Development of advanced analytical capabilities within client engineering departments, featuring VBA programming of Excel and Access.
- Integration of retail product development with other corporate functions, including power supply planning, risk management, generation operations, and T&D system planning.

1350 S. INDIANA PARKWAY, CHICAGO, IL 60605 312.945.3143 VCUSHING@METROPOLITANENERGY.COM

- Technical and market analyses for two business start-ups: broadband power line carrier over utility distribution lines and emission control technology for diesel trucks.

In 2003 developed a demand response business to electronically integrate the operations of large urban commercial buildings to regional grid operations and markets – leveraging commercial building automation systems and building thermal mass control technology.

Calpine Power Services, 1996 to 1997

As Senior Vice President, Calpine Power Services, responsibilities included wholesale and retail marketing; QF contract restructuring; market/competitor analysis; asset valuation; regulatory liaison; and participation on national and regional electric transmission grid committees. Key accomplishments include a Texas merchant plant market analysis and marketing plan – crucial to obtaining non-recourse financing.

Independent Consultant, 1995

As an independent consultant, assisted clients on power marketing programs, power sales tariffs, federal/state regulatory strategies and filings, strategic plans, power contract restructuring, regional transmission company development, and FERC restructuring activities. Clients included electric utilities, an independent power producer, a gas pipeline company, a power pool, and the electric utility trade association (EEI).

Potomac Electric Power Company, 1970 to 1995

Through early 1995, coordinated a multi-disciplinary team in planning, contracting, negotiating and administrative activities related to power pooling, transmission, and other coordination arrangements with electric utilities, including the PJM Interconnection. From 1978 to 1983, managed the Pepco corporate planning process. Through 1978, managed 230 kV & 500 kV substation construction projects and related data communications systems.

Manager, Interconnections 1984 to 1995

Responsibilities included coordination of power pool activities; interconnection agreements; transmission services; local and regional transmission system planning; long-term capacity and energy purchases; contract development; market and company research; financial & economic analysis; testimony and other filings with regulatory commissions.

Key accomplishments include: (1) arranging a long-term, multi-billion dollar power purchase; (2) coordinating an electric industry analysis of transmission and ancillary services and initiating an industry dialogue with FERC's Office of Electric Policy Review that led to the industry adoption of wholesale tariffs; (3) taking a leadership role in industry and regional reviews of the Clean Air Act issues for bulk power markets; and (4) serving on regional and national emission allowance trading committees and developing a emission allowance trading & hedging strategy.

Manager, Corporate Planning 1978 to 1983

Managed both the strategic and operations planning processes. Acquired broad, in-depth experience in financial & economic analysis, risk/return analysis, market/competitor analysis, and negotiations. Key accomplishments include a) coordinating off-site executive planning conferences; b) developing a 5-year corporate operations planning process; and c) developing a comprehensive long-term energy plan for management and regulatory review.

Senior Project Engineer 1970 to 1978

Directed engineers in the management and design of multi-million dollar 230kV and 500kV transmission substation construction projects. Acquired significant experience in project management; equipment procurement; system control and data acquisition systems; microwave communications systems; and shielding, grounding, and interference control.

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Education:

BSEE, University of Notre Dame, 1970.
MEA (Masters in Engineering Administration), George Washington University, 1978.
Public Utility Leadership Program, University of Georgia, 1994.
Negotiating Seminar, Massachusetts Institute of Technology, 1990.
Advanced Negotiating Seminar, Karrass Institute, 1985.
Effective Negotiating Seminar, Karrass Institute, 1984.
Utility Corporate Planning Seminar, Harvard University, 1980.
Mergers & Acquisitions Course, *American Management* Association, 1980.

Professional Activities:

- Registered Professional Engineer (State of Maryland).
- Taught strategic planning, market/competitor analysis, *and portfolio techniques* (in 1981 and 1983 for the MBA program at Marymount College, Virginia.)
- Past member of the EEI Power Supply Technical Task Force; the Power System *Planning and* Operations Task Force of the Electric Power Research Institute (1984-1987); and the IEEE Power Engineering *Society Communications Committee.*

Technical Publications:

"Transient Suppression in 500 kV Installations." No. C 74 030-3, presented at the IEEE PES Winter Power Meeting, New York, 1974.
"A Reliable Looped Microwave System Design." IEEE Transactions PAS-97 (March-April 1978): 432.

Community Activities: Pepco Speakers bureau; Washington D.C. Advisory Neighborhood Commission; Construction Committee of the 1992 Habitat for Humanity Jimmy Carter Work Project; taught English as a second language and Microsoft Office to immigrants.

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BOMA/CHICAGO EX. 3.2

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AFFIDAVIT OF VINCENT J. CUSHING

VINCENT J. CUSHING, being duly sworn, states as follows:

1. All facts stated in the Direct Testimony of Vincent J. Cushing on behalf of the Building Owners and Managers Association of Chicago are based solely upon my personal knowledge and experiences.

2. If I was called upon to testify and asked the came questions contained in the Direct Testimony of Vincent J. Cushing, I would give the same answers contained therein.

3. If called to testify, I would state that the information contained in the Direct Testimony of Vincent J. Cushing is true and correct to the best of my knowledge, information and belief.

4. Further affiant sayeth not.

Vincent J. Cushing

Subscribed and sworn to before me
this 14th day of December, 2007

Notary Public

"OFFICIAL SEAL"
Jodi S. Williams
Notary Public, State of Illinois
My Commission Expires Dec. 17, 2007